NEW Water
The brand of the Green Bay Metropolitan Sewerage District

January 30, 2020

Ms. Tania Taff
Division of Environmental Management
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, WI 54313-6727

RE: Weekly Report – status update for GAC malfunction
Reporting period January 26-February 1, 2020 (Report #1 for reporting period)

Dear Ms. Taff:

The purpose of this letter is to submit the initial weekly report summarizing developments as requested in your letter dated December 3, 2019. The reporting period for this report is January 26, 2020 through February 1, 2020. This report contains requested information that is currently available for the reporting period. Another report will follow with the remaining information. During a conference call on December 9, 2019, representatives from US EPA Region 5 and Wisconsin DNR agreed that weekly reports may be submitted in installments, as information becomes available.

Response:

1) *Mercury Emission Estimates, including mercury concentration of the sludge on a dry solids basis (ug/g), the sludge charging rate (kg/day) and the weight fraction of solids in the collected sludge after mixing.*

   A weekly sludge sample was taken during the reporting period on Wednesday, January 29, 2020 for analysis at a third party certified laboratory. Results are expected within two weeks.

   Emissions testing for mercury was conducted on December 12, 2019. Results have been submitted two WDNR and US EPA under separate cover. Emission estimates are being prepared and will be submitted in a future report.

The sludge charging rate and weight fraction of solids are summarized in the following table:

Date	Total Solids (%)	Daily Sludge Feed* (dry tons/day)	Daily Sludge Feed* (dry kg/day)
January 26, 2020	*Operating data to be provided in second report*		
January 27, 2020	*Operating data to be provided in second report*		
January 28, 2020	*Operating data to be provided in second report*		
January 29, 2020	*Operating data to be provided in second report*		
January 30, 2020	*Operating data to be provided in second report*		
January 31, 2020	*Operating data to be provided in second report*		
February 1, 2020	*Operating data to be provided in second report*		

*Daily sludge feed rate is the total amount of sludge combusted in the incinerator during the specified calendar day.

2) Dates and times the fluid bed incinerator (I08) was operated.

Date	Start Time	Stop Time	Run Time Hours:minutes
January 26, 2020	Operating data to be provided in second weekly report		00:00
January 27, 2020	"		00:00
January 28, 2020	"		00:00
January 29, 2020	"		00:00
January 30, 2020	"		00:00
January 31, 2020	"		00:00
February 1, 2020	"		00:00
		TOTAL:	00:00

3) *The parametric monitoring records of the wet scrubber C01A and the wet electrostatic precipitator C01B on a weekly basis until the GAC unit C01C is operating as needed to control mercury emissions.*

Parametric monitoring records for the week of January 26-February 1 will retrieved from the plant SCADA system averaged into blocks as required by the air operation permit.

4) *A timeline on progression of repairs on the GAC unit*

Repairs to the GAC vessel, including the fiberglass walls and internal grid structure, have been completed. Two complete shipments of carbon have been received and are ready to be placed in the vessel.

GBMSD has contracted with an independent expert to conduct a root cause analysis of the malfunction. The root cause analysis is in progress. The GAC will be placed back in service once the critical findings of the assessment are identified and addressed sufficiently to ensure safe and effective operation of the system.

5) *Plans for reducing mercury emissions in the interim*

GBMSD has taken, and will continue to take, the following steps to reduce mercury emissions:

1) GBMSD has maximized opportunities to landfill sludge once the treatment plant was stabilized. During the reporting period, GBMSD landfilled sludge Monday, January 27 through Thursday, January 30.

2) GBMSD has maximized its ability to store biosolids within the wastewater treatment plant processes to reduce the amount of sludge that needed to be landfilled or incinerated.

3) When there is a need to incinerate due to limited landfill operating hours, GBMSD operates the FBI and its other emission control systems in accordance with their respective parametric ranges - Secondary Combustion Chamber, Wet Scrubber, and Wet Electrostatic Precipitator.

4) Since 2006, GBMSD has administered a mercury pollutant minimization plan (PMP) under its Wisconsin Pollutant Discharge Elimination System permit. Under the mercury PMP, GBMSD works with permitted and non-permitted facilities in its service area to reduce the mercury discharges to the sanitary sewer system. The PMP targets facilities that fall under sectors that have historically been generators of mercury – dental, academic, medical, and industrial facilities, as well as residents in the service area. These efforts have resulted in reductions of mercury that enters the wastewater treatment system.

Sincerely,

GREEN BAY METROPOLITAN SEWERAGE DISTRICT

Thomas W. Sigmund, P.E.
Executive Director

cc. James Bonar-Bridges, WDNR
Louise Gross, US EPA
Dan Schaufelberger, US EPA
Thomas Henning, SEH
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Julie Maas, GBMSD